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in any regular and formal manner, whatever is put forth under the pretence of it being knowledge, is submitted to a competent tribunal, whose decisions silently and imperceptibly pervade general society, and go far towards exposing the shams and impostures of the day.

But I feel that I am occupying too large a portion of the time which belongs to this evening's meeting, and that I owe you my apologies for doing so. Allow me, however, to make one more observation, which will, I feel sure, have the cordial assent of every one who hears me; namely, that it is desirable that the Royal Society should persevere in the independent course which it has hitherto pursued, relying on its own character and on the exertions of its Fellows, seeking no adventitious aid, and satisfied with the conviction that no one can labour in the acquirement of knowledge without, sooner or later, rendering service to mankind.

On the motion of Dr. Charles Holland, the thanks of the Society were voted to the President for his Address, and he was requested to allow the same to be printed in the 'Proceedings.'

The following communications were read:—

1. "Researches into the Nature of the Involuntary Muscular Tissue of the Urinary Bladder." By George Viner Ellis, Esq., Professor of Anatomy in University College, London. Communicated by Dr. Sharpey, Sec. R.S. Received November 6, 1858.

(Abstract.)

In the present communication the author endeavours to show, that the involuntary muscular tissue of the bladder and the voluntary muscle in other parts of the human body have a like composition, and that Prof. Kölliker's view, that involuntary or smooth muscle is made up of fusiform cells, is incorrect. On the contrary, the muscular substance of the bladder is composed of lengthened fibres with fixed and tendinous terminal attachments. The fasciculi of muscular fibres in the bladder are interwoven into a network, and are marked at varying intervals by tendinous intersections, like those of the Rectus abdominis on a small scale.

The author terms what are usually called the 'nuclei' of the muscular tissue—'corpuscles,' and distinguishes two varieties of them,

the oval and the fusiform. The latter are the more numerous, and are the rod-like nuclei of Kölliker. Two or even three of these may be observed in the length of a single fibre. If a single muscular fibre of the bladder is isolated, it will be found to terminate as in voluntary muscle; connective tissue investing not only the fibre, but each of the separate portions into which it ultimately divides.

The author considers that the 'sarcous elements' of voluntary muscle are represented by the lines of dots visible in the muscular fibres of the bladder.

II. "On the Ova and Pseudova of Insects." By John Lub-Bock, Esq., F.R.S., F.L.S., F.G.S. Received Nov. 10, 1858.

(Abstract.)

In the 'Philosophical Transactions' for 1857, I endeavoured to show that the agamic eggs of *Daphnia* are formed upon the same type, and consist of the same parts, as any other egg. My object in undertaking the investigation of which the present paper is the result, was to determine whether the same held good of the agamic eggs or pseudova of *Coccus*, *Cynips*, and other insects. This inquiry was more interesting, because Prof. Huxley had found several differences between the ovarian products of the oviparous and viviparous Aphides; and because, according to Prof. Leydig, the development of the pseudova in *Coccus* was extremely peculiar.

My examination of *Coccus* was concluded, and the results committed to paper, in the early part of June last, but I then found that so little was known, especially in this country, about the development of insect-eggs generally, that I withheld my notes from publication, in order to add to them some account of the process of true egg-formation in the Insecta, which would enable me to point out more satisfactorily the differences between, or the identity of, these two processes.

In all female insects there are two ovaries, each consisting of at least two egg-tubes opening into a common chamber, the uterus. The egg originates and attains to nearly its full size in the egg-tube, and it is therefore with this portion of the generative organs that we are now mainly concerned.